

California State Water Resources Control Board

DEVELOPMENT OF AN URBAN WATER CONSERVATION REGULATORY  
PROGRAM

PUBLIC WORKSHOP – OCTOBER 1, 2008  
SUMMARY OF COMMENTS

The State Water Resources Control Board (State Water Board) held a public workshop on October 1, 2008, to consider information regarding the development of an urban water conservation regulatory program. Participants in the workshop were divided into five discussion (“breakout”) groups and were asked to address three general questions to assist the State Water Board in evaluating whether to initiate an urban water conservation regulatory program and what such a regulatory program should consist of. The summary of comments generated in these discussion groups and the combined sessions of the workshop is organized according to the three questions. There was no intent that the workshop participants achieve agreement on their views. Therefore, the comments described below do not represent a consensus of the participants and in many cases are contradictory with each other. The comments provided below are based on notes that do not always capture the context or basis for the comments.

**Question 1**

Question: Are the current local and state programs promoting or enforcing water conservation effective, or is there a need for new activities? What are the problems or weaknesses in the current programs?

Comments:

Effective Activities:

1. Local programs have a better chance of success by, for example, reflecting community values. Flexibility is important.
2. Many water agencies that have not signed the CUWCC<sup>1</sup> MOU<sup>2</sup> are still participating in water conservation.
3. Retrofitting fixtures upon resale of properties is effective.
4. Performance-based standards are more flexible than prescriptive standards.
5. Technologies such as water efficient clothes washers and dish washing machines are effective and should be promoted.
6. Marketing gets behaviour to change. Some local public education programs are very effective.

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<sup>1</sup> CUWCC – California Urban Water Conservation Council

<sup>2</sup> MOU – Memorandum of Understanding

7. Agricultural water infrastructure and efficiency can be improved with funding by urban water rate payers, as in the Imperial Irrigation District-San Diego County Water Authority deal.
8. Satellite or aerial imagery can be effective in measuring irrigated area, crop types, and water consumption.
9. GIS maps can be used to implement technology or conservation measures in the most effective areas.
10. Weather-based irrigation controllers are effective.
11. Selection of plants for landscape and landscape design can reduce water use.
12. Rebate programs are effective.

Ineffective Activities or Needs for Improvement:

13. Data and reporting: There was repeated mention of the inadequacy of available data. Data collection should be more effective and accessible to the public. There is a lack of consistent terminology and other requirements for data reporting. Oversight agencies need to coordinate in establishing consistent requirements and share data to avoid cost duplication. Better on-line reporting capability needs to be provided. There is a need for establishing a water conservation metric and a protocol for data reporting. Water conservation measures that are being conducted by water suppliers that are not signatories of the MOU are not being documented.
14. Agricultural water use is not being addressed. Water use efficiency could be implemented more cost-effectively in the agricultural sector. There should be collaboration with the U.S. Bureau of Reclamation to encourage more conservation.
15. Grant funding processes should be simplified. Funding should be allowed for water meters.
16. There is a need for a statewide education and outreach program to promote water conservation to supplement local education efforts.
17. There is inconsistency in the local implementation of water conservation.
18. There is no requirement that water suppliers sign the "Memorandum of Understanding Regarding Urban Water Conservation in California" (MOU).
19. There are no penalties for not complying with the provisions of the MOU.
20. There is a dilemma that if rate structures become effective in causing water conservation, water sales and associated revenue decline, resulting in monetary loss for agencies or the need to raise water rates.
21. Some landscape ordinances mandate lawns or other features that are contrary to water conservation. There should be a tax on turf.
22. For volumetric water rates to be effective, consumers need to be educated how their water bills are calculated and how their water use affects their bill.
23. There is a need for a set of tools to implement the goal of conserving per capita water use by 20 percent by 2020, including recycled water, grey water, and captured runoff.
24. Retrofits upon resale of properties may have limited effectiveness due to the low rate of re-sales (only 1 to 2 percent turnover annually). The 35 percent of

- Californians that rent homes should also be targeted. Total turnover by 2020 may be about 20-25 percent, including many newer homes.
25. There is a need for better documentation of the water savings and cost-effectiveness of BMP<sup>3</sup> implementation, not just degree of implementation of BMP measures.
  26. There is a lack of financial resources for conservation.
  27. Due to funding or expertise limitations, agencies have the most difficulty implementing the following BMPs: BMP 3 (water audits), BMP 5 (large landscape) and BMP 9 (conservation programs for commercial, industrial and institutional accounts). Regional agencies could assist in providing technical expertise.
  28. DWR and the Legislature need to be more involved.
  29. There are inconsistencies between the Regional Water Quality Control Boards (Regional Water Boards) and the State Water Board (examples were not cited in notes).
  30. Surface water users are penalized over groundwater users.
  31. There is a need for quality standards for new equipment and technologies. Poor performance of equipment or fixtures lead to consumer dissatisfaction, removal of the equipment, increased water use, and health hazards (e.g., scalding from low-flow shower heads).
  32. Duplicative efforts by regulatory agencies can result in conflict and public confusion.
  33. There is a disconnect between agencies that control development and local design standards, that is, cities and counties, and water suppliers that are responsible for implementation and serving water needs for development. Water revenues that could be used to assist conservation activities may not be available to cities or other implementing agencies. It is difficult to make water conservation a priority in city budgets. Requirements can conflict with conservation objectives. Stakeholder involvement needs to include cities and other entities and associations such as the League of California Cities and California Association of Counties.
  34. Conserved water is used to supply new development.
  35. Regional Water Boards are requiring cities to use turf in bio-swales for storm-water control. This requirement may conflict the state ordinance against use of turf in roadway landscape.
  36. There is a need to expand the coverage of Urban Water Management Plans to smaller water suppliers and provide Web-based reporting.
  37. Local cost-effectiveness can be used as a basis for exemption from BMPs.
  38. There is not enough incentive for customers to participate in water audit programs. Audits should be included in the resale of residential properties, but realtors do not support audits. Stronger rules are needed for audits.
  39. There is question about what is done with conserved water, that is, is it retained in the environment or made available for more development.
  40. Per capita metrics are useful indicators but are difficult to apply in a regulatory program due to climatic, regional, and residential/commercial/industrial mix differences.

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<sup>3</sup> BMP – Best Management Practice

41. SB 1391 is not meeting its goals; the focus should be on recycling.
42. When an agency has a plentiful water supply, historically it has little incentive to conserve.
43. Cheap water is a disincentive to water conservation.
44. Small disadvantaged communities have no incentive to conserve.
45. Agencies that have metered customers are not required to read and bill according to the meters.
46. It is difficult for communities to obtain the technical expertise need for implementation in the industrial sector.
47. Agencies have the most difficulty implementing the following BMPs: water audits (3), large landscape (5), and conservation programs for commercial, industrial, and institutional accounts (9). There needs to be a state role for industrial conservation.

#### Important Considerations:

48. There is a need for one focussed water conservation effort rather than many separate regulatory/conservation programs.
49. There is a need for stability in requirements to facilitate local agencies to obtain funds to meet them.
50. Greywater, recycled water, and storm water use need to be considered. It is difficult to meter and quantify greywater and storm water use. Storm water may contain contaminants that make it unsuitable for use.
51. Greywater standards are needed [they already exist], and the public needs help with permitting. Existing greywater standards are too strict. The systems may not be cost-effective, and there are public health implications in greywater use. NPDES<sup>4</sup> permits need to address greywater, etc.
52. The DWR<sup>5</sup> is better suited to manage Urban Water Management Plans.
53. Urban and agricultural runoff sustain the flow in perennial creeks, an environmental benefit that may be adversely affected by conservation.
54. Water is a necessary resource for certain industries. Conservation goals could adversely affect the water supply available to some communities for business growth.
55. Residential programs need to target the 35 percent of California residents that rent their homes, not just homeowners.
56. Some factors regarding disadvantaged communities need to be considered: public employees may be unpaid volunteers, there is a limited amount of assistance available to consumers, regulations without intermediate steps may hurt these communities, exemptions from regulations may be appropriate.
57. Some industries and others have already been conserving water. A policy should not penalize organizations for work already done.

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<sup>4</sup> NPDES – National Pollutant Discharge Elimination System

<sup>5</sup> DWR – California Department of Water Resources

## Question 2

Question: What, if any, should the involvement of the Water Boards be with respect to water conservation? What is the real need and what problems could the Water Boards potentially help solve?

Comments:

58. One of the five discussion groups was polled to gauge the general opinion on whether to undertake a regulatory program. About one third supported the view that the State Water Board should regulate conservation; about one third opposed any regulation, and the remaining third were undecided or did not have strong opinions in either direction. Another discussion group found that a majority of its participants felt that the State Water Board should have a role in water conservation, but that it should be limited or nonregulatory and that a regulatory/mandatory program is premature.
59. The State Water Board is the best agency to play a regulatory role. It should set measurable standards. The Water Board is better suited to consider environmental goals than the Public Utilities Commission, which is more concerned about water rates.
60. The State Water Board could be the lead to coordinate with other agencies streamlined data collection. The state should mandate data collection and protocols. The state could use the CPUC approach as an example.
61. The State Water Board should be more active in leading a public education campaign to promote water conservation. The state's "Flex Your Power" campaign was suggested as a model. The State Water Board should engage more in the U.S. Environmental Protection Agency's Water Sense Program.
62. There should be a statewide outreach approach: not regulatory, teach conservation in school, TV saturation, use same techniques as container recycling and energy conservation programs are using, use businesses to inform private entities.
63. The California Water Awareness Campaign is working on statewide educational materials for local use but needs more funding to support a statewide effort.
64. Promote the Water Sense program: product labelling.
65. It is premature to initiate a regulatory program. There is a need for more data before imposing non-incentive-based regulations. Current activities, especially the revision of the BMPs by CUWCC and the development of a conservation strategy by the 20x2020 Agency Team, should be completed before deciding on a regulatory program. State Water Board should enforce these other programs (CUWCC MOU and model landscape ordinance) after they are established and rely upon a regulatory program as a backstop. Before initiating a regulatory program, urban water management plans should be reviewed to assess current conservation activities and effectiveness.
66. State agencies should set an example by adopting conservation measures in state buildings. State agencies should be subject to local jurisdictional control.

67. The State Water Board should use currently effective local water conservation programs as a model.
68. There should be field verification of implementation of conservation BMPs.
69. The Water Board should require all water suppliers to sign the CUWCC MOU. There should be a simplified form for agencies with less than 3,000 connections. The state should provide funding for the California Urban Water Conservation Council (CUWCC).
70. The State Water Board should fund water meters.
71. The State Water Board should help small communities, such as to develop urban water management plans, and consider median household income in providing assistance. Small communities need help in preparing funding applications and in managing projects once funding is awarded.
72. The state should wait on establishing a regulatory program until the revised BMPs are established, which will provide important flexibility.
73. There should be a tax the turf campaign. The Water Board could ban ordinances that require lawns.
74. There should be a public goods charge on water to create a pool of funds for agencies with the best savings opportunities. On the other hand, local agencies may oppose this due to lack of control or would support this only if the revenue were kept at the local level.
75. There is a need for the State Water Board to act as an umbrella agency and develop standard definitions.
76. The State Water Board should provide an environmental benefit analysis.
77. A new state program should find ways to motivate agencies that are not actively promoting conservation.
78. Regional needs for water conservation should be incorporated into Basin Plans.
79. Water needs should be a required element in general plans to connect land use to water and water conservation. The State Water Board should recommend that a water element be required for general plans and define the parameters that should be addressed by the water element.
80. Codes, ordinances, and standards should be changed so that they either encourage or require water conservation measures.
81. Regulate with a credit system (presumably conservation credit trading).
82. Regulate dry weather runoff better.
83. Encourage the California Public Utilities Commission to support funding for energy efficiency through water efficiency.
84. There needs to be involvement of a broad spectrum, including representatives of local government (e.g., League of California Cities, California State Association of Counties), landscaping community, Division of Rate Payer Advocates (CPUC?). Use businesses and nonprofits to disseminate message.
85. Provide a "white paper" regarding "reasonable use". There needs to be a clear definition of waste and unreasonable use.
86. The State Water Board should have a bigger role in facilitating grants for water use efficiency. Water use efficiency grants should be available to all agencies, not tied to Delta benefits.

#### Other Considerations:

87. There should be better regulations for water recycling: regulate as a water supply, use drinking water standards for regulation.
88. The State Water Board should provide extra points to projects that address runoff and pollutants at the same time.
89. Customer behaviour needs to change. Local suppliers have direct relationship with customers; it is unclear what the state role would be.
90. There is question whether bottled water use increases or decreases consumption compared to tap water use.

#### Question 3

Question: If a regulatory approach is needed, how should an urban water conservation regulatory program be structured? Three regulatory options have been identified in the Discussion Paper for this workshop: 1) water rights permit provisions, 2) targeted enforcement of waste or unreasonable use, and 3) prescriptive or performance-based urban water supplier mandates. Discuss the pros and cons of each option.

#### Comments:

91. There should be a mix of all approaches.
92. Water rate setting is too complex to set uniform state rules; it should be dictated at the local level.
93. The State Water Board should include tiered water rates in a water conservation regulatory program. Tiered rates should not be used in a manner that extends subsidies to certain groups, such as different rates for different water use sectors, such as residential, commercial, industrial, and agricultural.
94. The Board's role should be the enforcement of the voluntary BMPs. Prescriptive actions should focus on the "foundational" BMPs.
95. The state should require and verify implementation BMPs and require documentation supporting exemptions from the BMPs.
96. Prescriptive standards should be limited, such as retrofitting of toilets upon resale of properties.
97. The state should mandate the retrofitting of toilets or other fixtures upon resale of properties. However, it was stated that the effectiveness of this idea could be limited due to the low rate of resale of properties. The state should provide funding incentives for this program.
98. Water metering should be mandated. Furthermore, all new developments should be required to meter landscape and household water use separately.
99. If regulations are pursued, the state should start with performance-based targets. There should be a cap and trade system allowing water suppliers that exceed conservation goals to sell conservation credits to other agencies. Performance-based programs allow for flexibility and ability to explore new solutions.

100. Prescriptive standards can actually impede conservation programs.
101. The total water efficiency picture needs to be considered, not just what agencies report on.
102. Consider Median Household Income for a community when imposing requirements.
103. A performance-based program should be based on per capita use.
104. Cost-effectiveness should be a criterion for water conservation.
105. Any regulatory program should include periodic evaluation of its effectiveness.
106. Mandated regulations need to be tiered to tailor them to different-sized communities with different resources available and different regions with different water supply and climatic conditions.
107. The State Water Board should develop a program associated with NPDES permits for storm water and industrial discharge, where there is significant water savings potential and the regulations already exist. On the other hand, there is criticism of the storm water NPDES program and this is not a good vehicle for a prescriptive program.
108. State government resources may be too limited to implement a regulatory program.
109. When establishing requirements, especially performance targets, there needs to be recognition for industries or agencies that already have implemented water conservation.
110. The state should account for past water conservation efforts when setting baseline levels.
111. New developments should be required to be water neutral, using a credit system.
112. Before implementing regulations applying to all agencies, effort should be focussed on getting all agencies to sign the CUWCC MOU.
113. Small communities should have to prepare Urban Water Management Plans, perhaps using a simplified on-line questionnaire.
114. Targeted enforcement of waste could be politically unpopular and ineffective unless it is part of a drought contingency.
115. With respect to water rights permit provisions, the following pros and cons were identified:
  - Pros:
    - Achieves compliance
    - Addresses individual agency water use
    - Responds to regional and Basin Plan needs
  - Cons:
    - The provisions may be a moving target
    - The metrics may be different
    - This approach does not reach all water users
    - BMPs do not necessarily equate to water conservation
    - Prescriptive standards do not reward innovation
    - The water rights program is too cumbersome, contentious, and slow to work
116. With respect to whether to have a prescriptive-based program, the following pros and cons were identified:

Pros:

This could be a means for obtaining statewide data.  
Prescriptive measures are easily measured.

Cons:

This approach may encourage litigation.  
This approach would be difficult to address. It is difficult to measure the benefits of particular prescriptive actions, such as high efficiency toilets, washing machines, or landscaping. Incentive-based programs are better.  
Prescriptive measures are costly.  
Performance-based measures allow more flexibility.